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# Evaluation of Mental Effectiveness Training for people with experience of using mental health services

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*Final Report for Comic Relief*

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## Executive summary

### Background

People with experience of using NHS mental health services often find that services focus on 'illness' rather than 'health', which is not always conducive to their recovery. NHS mental health services do not routinely provide knowledge about how to look after our minds. However, there is some pilot evidence that mental effectiveness training provided by the social enterprise Mindapples helps people to learn about their own minds and self-manage their stress (Webber et al., 2015). It is possible that it could similarly help people who have experience of using mental health services.

### Aims

This study aimed to evaluate the feasibility of adapting and delivering the Mindapples training programme to people with experience of mental health service use; its effectiveness in improving their mental wellbeing, ability to self-manage their stress and knowledge about mental effectiveness; and their perspectives on its usefulness for their lives.

### Method

A waiting-list controlled trial design was used for the evaluation. 82 people with experience of mental health service use chose to take part in the study and completed a baseline questionnaire, 39 in the intervention group and 43 in the intervention waiting-list control group. The Mindapples training was delivered in eight weekly sessions to the intervention group. Data on mental wellbeing, ability to self-manage stress and knowledge about mental effectiveness was gathered from both groups using self-completed questionnaires immediately prior to the training, on completion of the training and three months later. Additionally, two focus groups were held to explore participants' perceptions of the usefulness of the training three months after it finished. Control group participants received the training at the end of the study.

### Results

Participants receiving the Mindapples training increased their knowledge about their own minds in contrast to the control group. In this small sample, these improvements were statistically significant and maintained at three-month follow-up, and after controlling for socio-demographic variables. A univariate statistically significant increase in participants' ability to self-manage their stress was also found for the intervention group post-training and at three-

month follow-up, though differences between the groups at baseline largely account for this. The focus groups revealed that the participants had readily engaged with the Mindapples training and were prepared to make the voluntary commitment to come to the sessions, often overcoming several barriers to doing so. While they made some recommendations for changes, participants also provided examples of how it had benefitted them in their lives.

## Discussion

This was a small pilot study which found that the Mindapples training had a moderate positive effect on participants' knowledge of mental effectiveness. A larger study with random allocation to groups is required to confirm these findings.

## Recommendations

1. This pilot study found that people with experience of using mental health services can increase their knowledge of mental effectiveness by attending the Mindapples training programme. The size of the effect on this outcome was moderate. This indicative evidence of effectiveness suggests that the Mindapples training may be beneficial for people with experience of mental health service use and it may play a positive role in their recovery. As there is no evidence that it causes harm, the findings from this pilot study suggest that the training is safe to use and may help people.
2. Further research is required to evaluate its impact on recovery from mental health problems. A larger study is required to more accurately estimate the effectiveness of the training and to evaluate if the training has a similar effect in specific groups of people with mental health problems. This study will require a longer follow-up period and will need to use more varied outcome measures.
3. There is some evidence that some participants already had some knowledge of the course content. Many had several years' experience of using mental health services. Therefore, the training could be more effective if used with people after their first experience of mental distress, or as part of public health preventive interventions. However, some participants with a long history of service use did say the course was different to anything they had done previously. It is recommended that future pilots of the training are fully evaluated to understand where this intervention fits into existing service provision and to ensure it is achieving its desired outcomes.

## Acknowledgements

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This study was made possible with the support of several key people at Mindapples and the National Survivor User Network (NSUN).

Esther King played a vital role in co-ordinating the Mindapples training and liaising closely both with NSUN and the study participants. Amanda Walderman and Andy Gibson delivered the training; their energy and enthusiasm engaged the participants and helped to ensure its success.

The staff at NSUN helped to recruit participants to the study. In particular we wish to thank Sarah Yiannoullou, Mulimba Namwenda, Naomi James and Stephanie Taylor-King for their support throughout the project.

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# 1 Background

## 1.1 Mindapples

Mindapples closely follows an entrepreneurial model of a social enterprise. It was created by an energetic and entrepreneurial individual and it has a strong social aspect to its mission, which is codified in its memorandum and articles and non-profit status. It could be regarded as a training organisation and grouped with other organisations which provide short vocationally orientated programmes, although it has also consistently worked in and received funding from the healthcare and public health sectors. It is a small organisation compared to others which operate in this area. It does not own or lease its own training premises as would a number of such organisations.

The nature of the programmes which it delivers distinguishes Mindapples from most other social enterprises involved in training. It does not engage in education or training delivering programmes in which the curriculum and assessment is externally set by, for example, a National Skills or Assessment Body. Rather, it has evolved its own model of training which has required a large amount of creative activity and primary research.

Unlike similar social enterprises, Mindapples did not seek or rely upon the typical sources of public sector funding to promote or develop programmes which aimed to respond to specific contractual requirements set by Government funding bodies. Instead, Mindapples has taken a far more challenging route to develop its own model of training and to compete in a highly commercial setting to establish the reputation and value of their product without relying upon external validating bodies or a nationally set curriculum.

In this respect, Mindapples has been demonstrably successful with a list of highly regarded clients. The two questions for the organisation now are: (1) is this commercial success matched by the efficacy of their interventions in clinical and/or educational terms; and (2) can these benefits be delivered at scale.

Bearing this in mind, Mindapples' training model has evolved in a structured form which enables delivery by appropriately qualified and experienced trainers who may be engaged as self-employed workers or as contractors as well as directly employed staff. This is critical for such a social enterprise in that it enables the organisation to grow beyond the time and energy limitations which inevitably constrain a founder. The next step was therefore to assess the efficacy of the training delivered by two trainers to determine whether the training shows promise for helping participants with their health, work and relationships.

## **1.2 Mental effectiveness training**

The Mindapples training aims to teach psychological awareness, mental resilience and self-efficacy by enabling participants to understand the nature of their minds and mental health (by which is meant maintaining a healthy mind, not treatment of mental health conditions), and to develop effective coping mechanisms to deal with stress and make the most of their mental capabilities. Although originally focused upon workplace (or study orientated) contexts, the Mindapples model has a very broad application which could also readily be extended to contexts where people need to understand and manage mental and psychological stress, and perform well under pressure. Possible examples could include residents of long stay or custodial institutions, or people undertaking a carer role for a relative. In this study the focus is on people with experience of using mental health services.

The Mindapples training consists of 8 sessions:

1. Love your mind
2. Master your moods
3. Get motivated
4. Handle pressure
5. Know yourself
6. Make smarter decisions
7. Influence people
8. Think creatively

Each session provides accessible insights from research about our minds. This is presented in a lively and engaging way by the trainers. The presentation of research findings is supported by clear and eye-catching presentation materials and handouts which offer practical suggestions about how participants can better look after their minds and be more mentally productive. The sessions are interactive and involve discussion, reflection, group activities and practical tasks so that participants remain engaged throughout. Takeaway messages are highlighted during and at the end of sessions which summarise the key points for participants. Additionally, some homework tasks are set for participants to complete between sessions, such as keeping a mood diary, daily tasks and small self-challenges, for example.

## **1.3 Mental effectiveness and mental health**

Mental health policy in the UK is oriented towards supporting the recovery of people with mental health problems (Department of Health, 2014). However, NHS mental health services



often struggle to deliver recovery-focused care as diagnostic-led care clusters maintain a focus on 'illness' rather than 'health'. Although Recovery Colleges provide opportunities for people to learn about mental health, they do not appear yet to include mental effectiveness on their curricula.

Pilot evidence with student nurses suggests that the Mindapples mental effectiveness training programme helps to improve their ability to self-manage stress and learn more about mental effectiveness (Webber et al., 2015). Both of these can support an individual's process and experience of recovery. Therefore, it is important to evaluate the extent to which this training can similarly help people with experience of mental health service use.

## 2 Aims

This study aimed to evaluate a pilot of the Mindapples training programme 'Your Mind: A User's Guide' with people who had experience of using mental health services. In particular, the evaluation aimed to establish:

- The feasibility of adapting the Mindapples training programme 'Your Mind: A User's Guide' and delivering it to people with experience of using mental health services.
- The effectiveness of the programme in improving wellbeing, ability to self-manage stress and knowledge about mental effectiveness.
- The perspectives of participants on the usefulness of the training for their lives.

## 3 Method

### 3.1 Design

We used a waiting-list controlled trial design for the evaluation. The strength of this design is the inclusion of a control group which allowed us to evaluate if any changes over time would have occurred naturally without the training. It also meant that all participants received the training, eventually.

We recruited participants in two cohorts. We aimed to randomise the participants to an intervention group, which received the training, and a control group, which formed a waiting list for the training. However, some participants expressed a strong preference to be in either the intervention or control group because they were unable to attend the training either straight away or in three months' time. We permitted these to choose their group to secure their participation in the study. Those who did not express a preference were randomised to either the control or intervention group. As it was not a wholly randomised trial it is best defined as a waiting-list controlled trial.

Data were collected by self-complete questionnaires at baseline (prior to the training commencing), at the end of the final training session and three months later. Paper questionnaires were used for most of the data collection, though a link to an online survey was emailed to participants who were unable to complete a paper version.

Embedded within the trial was a qualitative process evaluation to explore participants' experiences of the training. This consisted of focus groups with the intervention group three months following completion of the training programme. The focus groups explored participants' experiences of the training and their perception of its impact on their lives.

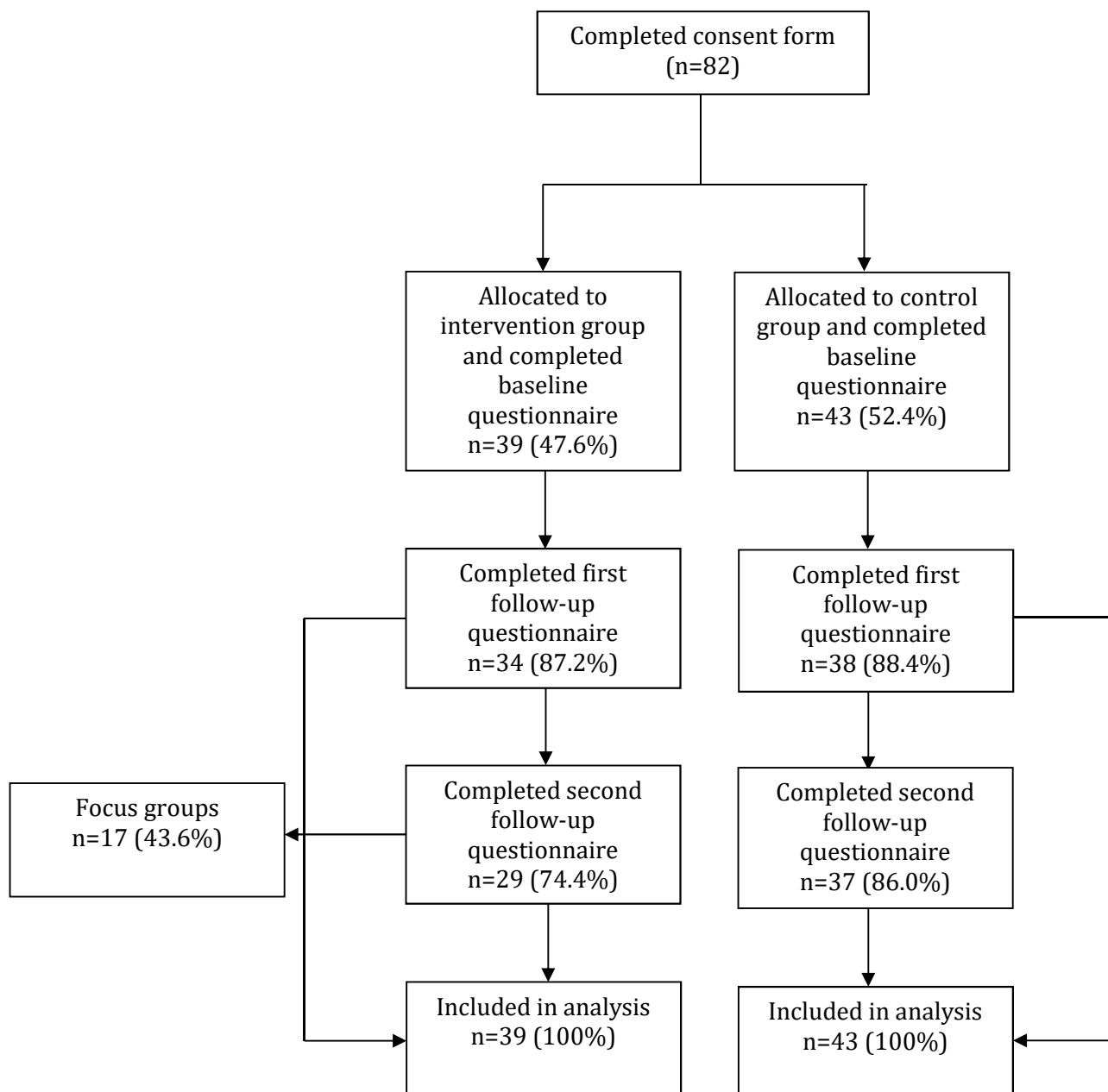
### 3.2 Sample

People with experience of using mental health services were recruited to participate in the study. To achieve full data on 30 participants in each group, the minimum considered necessary to pilot an intervention (Lancaster et al., 2004), we aimed to recruit 40 participants for each of the intervention and control groups to allow for a 20% drop-out. This target was achieved with a total of 82 participants completing baseline questionnaires, with 39 in the intervention group and 43 in the control group. 72 questionnaires were completed at first follow-up and 66 at the second follow-up. The flow of participants through the study is shown in figure 1.

The recruitment of the sample was conducted in two waves. The National Survivor User Network (NSUN) distributed information about the study to members of their network in

London via email, newsletters and their website. The only inclusion criterion was that potential participants had experience of using mental health services and could attend the training at a venue in central London. No information about diagnosis, or length or severity of illness, was requested as our interest in this pilot study was to evaluate if the Mindapples training was acceptable to this group and likely to produce positive outcomes in a diverse group of people with experience of using mental health services.

**Figure 1. Flow of participants through the trial**



### 3.3 Outcome measures

Three outcomes were of interest in this evaluation and were measured before and after the training and at three months follow-up. Firstly, mental wellbeing was measured using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) (Stewart-Brown et al., 2011). This is a well validated outcome measure for use in the general population and is responsive to change in a wide variety of mental health interventions and populations (Maheswaran et al., 2012). The standard 14-item scale was used and participants could score between 14 and 70. The mean score for the general population in England is 52 (Health and Social Care Information Centre, 2014).

Secondly, participants' ability to cope with stress was measured by a four-item self-efficacy and resilience scale (adapted from Sawatzky et al., 2012). This scale has been developed and used with students, though the items have general applicability. Scores on the measure range from 4 to 16, with higher scores representing greater stress management self-efficacy.

Thirdly, we measured participants' knowledge of mental effectiveness through a 14-item multiple choice quiz. We based the questions on the course content to assess their ability to understand and learn about their minds. Higher scores (range 0 to 14) represent greater knowledge of mental effectiveness.

### 3.4 Procedures

Potential participants were asked to contact the study team who provided them with the information sheet and consent form for the study. They were invited to attend a 'taster session' to find out more about the training. After agreeing to take part and signing the consent form, those who did not express a strong preference were randomised into either the intervention or control group. To ensure sufficient participants were recruited to the study, we undertook recruitment in two stages. The second wave of recruitment occurred 8 months after the first to allow time for all follow-ups to be completed. 36 participants were recruited in the first wave and 46 in the second.

Participants in the intervention group self-completed a questionnaire at baseline, prior to the first session of the Mindapples training programme. This comprised a socio-demographic schedule, the WEMWBS, the self-efficacy and resilience scale and the multiple choice quiz about mental effectiveness. Participants in the control group self-completed the same questionnaire at the same time.

At the end of the Mindapples training programme, the intervention group self-completed a second questionnaire comprising the three outcome measures (WEMWBS; self-efficacy and resilience; knowledge of mental effectiveness). The control group self-completed

the same questionnaire at the same time. Finally, both the intervention and control groups completed this same questionnaire again three months later to evaluate the enduring impact of the training. The number of participants who completed each questionnaire decreased slightly at each administration, but we achieved our goal of complete data on a minimum of 60 participants (figure 1). Each participant was issued with a unique identifier which they were asked to use on each questionnaire to enable us to measure change over time for each individual. Participants were provided with a £10 shopping voucher for completion of each questionnaire.

Focus groups for participants in the intervention group were scheduled when the final questionnaire was due to be completed. Participants completed this at the beginning of the group whilst waiting for it to start. The group discussion was largely directed by the experiences of the participants, though the researchers asked about participants' experience of the training and what they felt they gained from it; and their thoughts on how it impacted on their ability to manage stress and cope in their lives. The interim findings of the evaluation were presented to the participants to elicit their thoughts about how they resonated with their experiences.

The focus group discussions were facilitated by researchers with lived experience mental health service use. This helped to equalise power imbalances and to encourage participants to share their experiences more openly. One group was held after each wave of training, with nine participants in the first and eight in the second. Additional written feedback was received from two participants and incorporated in the data for analysis. Focus group participants were self-selected and therefore most likely to be those who were the most positive about the training. However, having qualitative data from 19/39 (48.7%) participants, including some discordant voices, we are confident at achieving a broad range of perspectives about the training.

### **3.5 Mindapples programme**

Mindapples adapted their training programme 'Your Mind: A User's Guide' for use with people who have experienced mental health problems and have used mental health services. The eight-session training programme was delivered in weekly sessions. Sessions were held in a venue in central London to facilitate access to participants who lived across the capital. Registers of attendance were kept and participants who completed at least six of the eight sessions were provided with a certificate of completion.

### 3.6 Analysis

An intention-to-treat analysis was conducted of the 82 participants who completed the baseline questionnaire. Outcome data were assessed according to which group participants were allocated to, irrespective of how many sessions of the Mindapples programme the members of the intervention group attended. Participants were not excluded from the analysis if they had missing data. Missing outcome data was imputed by utilising the last recorded value, assuming the null hypothesis of no difference occurring over time.

We used chi-squared tests and t-tests to evaluate the differences between the intervention and control groups at baseline, and paired t-tests to evaluate change over time on our three outcome measures from baseline to post-training and three-month follow-up. Repeated measures multivariate analysis of covariance (MANCOVA) was used to control for the potential confounding effect of baseline differences between the intervention and control groups.

The focus groups were audio recorded for analysis. Focus group data analysis was informed by grounded theory (Strauss and Corbin, 2008), but was both inductive and deductive as it was guided by both the participants and the researchers. The data analysis was conducted by the two researchers with lived experience of mental health service use.

### 3.7 Ethical approval

Ethical approval for the study was obtained from the Department of Social Policy and Social Work Research Ethics Committee at the University of York.

## 4 Results

### 4.1 Participant socio-demographic characteristics

The socio-demographic characteristics of the sample can be found in table 1. 73.2% (n=60) of the sample were women, which reflects a general trend of women being more likely to participate in research than men. The recruitment of more male participants will need to be considered in future studies to fully evaluate the effectiveness of the Mindapples training across the genders. The mean age of the sample was 39.6 (s.d.=10.7) years of age, which is typical of studies of people with experience of using mental health services. The ethnic diversity of the sample, with only 50.0% (n=41) of the participants of white British origin, and the relatively low proportion of people married or cohabiting (18.3%, n=15) reflects the population of mental health service users in London. These sample characteristics were similar in both the intervention and control groups, illustrating that the recruitment and randomisation procedures successfully produced similar intervention and control groups.

**Table 1. Participant socio-demographic characteristics**

	Intervention group n=39 (%)	Control group n=43 (%)	Test statistics
<b>Gender</b>			$\chi^2=0.59$ , df=1, p=0.44
Female	27 (69.2)	33 (76.7)	
Male	12 (30.8)	10 (23.3)	
<b>Age Mean (s.d.)</b>	41.5 (10.7)	37.9 (10.8)	t=1.51, df=77, p=0.14
<b>Ethnicity</b>			$\chi^2=8.72$ , df=9, p=0.46
White British	21 (53.8)	20 (46.5)	
Other white ethnicity	0	2 (4.7)	
Black Caribbean	2 (5.1)	2 (4.7)	
Black African	1 (2.6)	(0)	
Indian	4 (10.3)	2 (4.7)	
Pakistani	1 (2.6)	3 (7.0)	
Chinese	0	3 (7.0)	
Bangladeshi	0	1 (2.3)	
Mixed ethnicity	4 (10.3)	5 (11.6)	
Other ethnicity	6 (15.4)	5 (11.6)	
<b>Living status</b>			$\chi^2=2.69$ , df=3, p=0.44
Single	21 (53.8)	29 (67.4)	
Married or cohabiting	9 (23.1)	6 (14.0)	
Divorced or widowed	9 (23.1)	8 (18.6)	
<b>Cohort</b>			$\chi^2=0.15$ , df=1, p=0.70
Cohort 1	18 (46.2)	18 (41.9)	
Cohort 2	21 (53.8)	25 (58.1)	



## 4.2 Feasibility of delivering Mindapples training

The Mindapples team took advice and adapted the training, which they normally deliver to businesses, for people with experience of using mental health services. The learning materials were sufficiently generic and transferable to make this process reasonably straightforward. Attendance of participants in the intervention group at the training was very high with a mean attendance of 6.2 (s.d.=2.1) out of the 8 sessions. However, on average, participants in the first cohort attended more sessions than those in the second cohort (mean=7.1 vs. 5.4 sessions,  $t=3.02$ ,  $df=26.1$ ,  $p=0.006$ ). The first cohort ran over the summer whilst the second ran over the Christmas period, which may account for some of this difference.

Over a quarter ( $n=11$ , 28.2%) of participants in the intervention group attended all eight sessions, which demonstrated their continued commitment to this training programme in the face of other demands on their time. This also demonstrated that it was feasible to deliver the Mindapples training to people with experience of using mental health services.

## 4.3 Baseline comparisons

At baseline the intervention group had slightly higher mean scores on the measure of ability to cope with stress than the control group (table 2). However, there were no significant differences between the intervention and control groups on their mental wellbeing and knowledge of mental effectiveness (table 2) at baseline.

**Table 2. Outcome measures at baseline**

	Intervention group mean (s.d.)	Control group mean (s.d.)	Test statistics
<b>Mental wellbeing (WEMWBS)</b>	37.6 (7.8)	35.5 (9.0)	$t=1.10$ , $df=80$ , $p=0.28$
<b>Ability to cope with stress</b>	8.9 (2.2)	7.8 (2.7)	$t=2.04$ , $df=80$ , $p=0.04^*$
<b>Knowledge of mental effectiveness</b>	8.0 (2.3)	7.2 (2.3)	$t=1.44$ , $df=80$ , $p=0.16$

## 4.4 Outcome measures at follow-up

At post-training, the intervention group had an increased ability to cope with stress (mean paired difference = 1.6 (95%CI=0.8 to 2.3)) and increased knowledge of mental effectiveness (mean paired difference = 2.6 (95%CI=1.8 to 3.3)) (table 3). Although mental wellbeing scores improved, the difference was not statistically significant. Improvements in participants'

knowledge of mental effectiveness post-training were positively correlated with their attendance at the Mindapples training (the more sessions they attended, the greater their knowledge increased ( $r=0.55$ ,  $p<0.001$ )), suggesting that the sessions had a cumulative effect on their knowledge. There were no statistically significant changes on any outcome measure post-training for the control group.

The increased ability to cope with stress (mean paired difference = 1.3 (95%CI=0.5 to 2.1) and increased knowledge of mental effectiveness (mean paired difference = 2.5 (95%CI=1.7 to 3.4) of the intervention group was sustained at three months follow-up. In contrast, there were no statistically significant changes in the control group on the three outcome measures over time (table 3).

**Table 3. Change in outcome measures over time**

	Baseline mean (s.d.)	Post-training mean (s.d.)	Follow-up at 3 months mean (s.d.)
<b>Intervention group</b>			
Mental wellbeing (WEMWBS)	37.6 (7.8)	39.7 (11.1)	40.1 (8.8)
Ability to cope with stress	8.9 (2.2)	10.4 (2.1)***	10.2 (2.1)**
Knowledge of mental effectiveness	8.0 (2.3)	10.5 (3.0)***	10.5 (3.0)***
<b>Control group</b>			
Mental wellbeing (WEMWBS)	35.5 (9.0)	37.2 (9.2)	37.3 (11.5)
Ability to cope with stress	7.8 (2.7)	8.1 (2.7)	8.0 (2.7)
Knowledge of mental effectiveness	7.2 (2.3)	7.8 (2.9)	7.6 (2.8)

Differences from baseline: \* $p<0.05$ , \*\* $p<0.01$ , \*\*\* $p<0.001$

**Table 4. Interaction effects for intervention/control groups<sup>1</sup>**

	Variables <sup>2</sup>	df	Mean Square	F	p	Partial $\eta^2$
<b>Mental wellbeing (WEMWBS)</b>	Time	2	41.9	0.98	0.38	0.02
	Time x group	2	33.6	0.79	0.46	0.02
<b>Ability to cope with stress</b>	Time	1.7	4.99	1.54	0.22	0.03
	Time x group	1.7	8.09	2.51	0.10	0.05
<b>Knowledge of mental effectiveness</b>	Time	2	0.27	0.10	0.91	<0.01
	Time x group	2	14.77	5.25	0.007	0.09

<sup>1</sup> Covariates entered into the model = group, age, gender, ethnicity

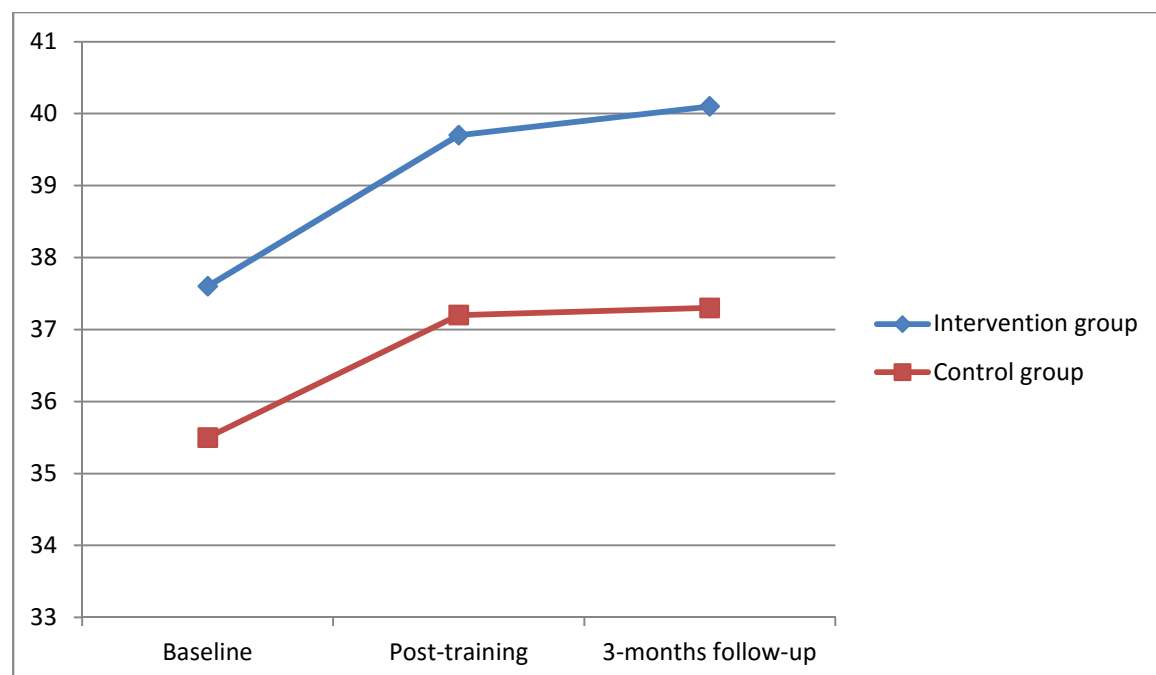
<sup>2</sup> Interaction effects of covariates are omitted for brevity

To control for the potential confounding effect of age, gender and ethnicity, we undertook a repeated measures multivariate analysis of covariance. There was a significant group by time interaction effect for participants' knowledge of mental effectiveness ( $F(1,52)=5.25$ ,  $p=0.007$ , partial  $\eta^2=0.09$ ) with a moderate effect size (table 4). This means that participants' improvements in knowledge is associated with the group they were allocated to rather than other potential confounding variables over these time points.

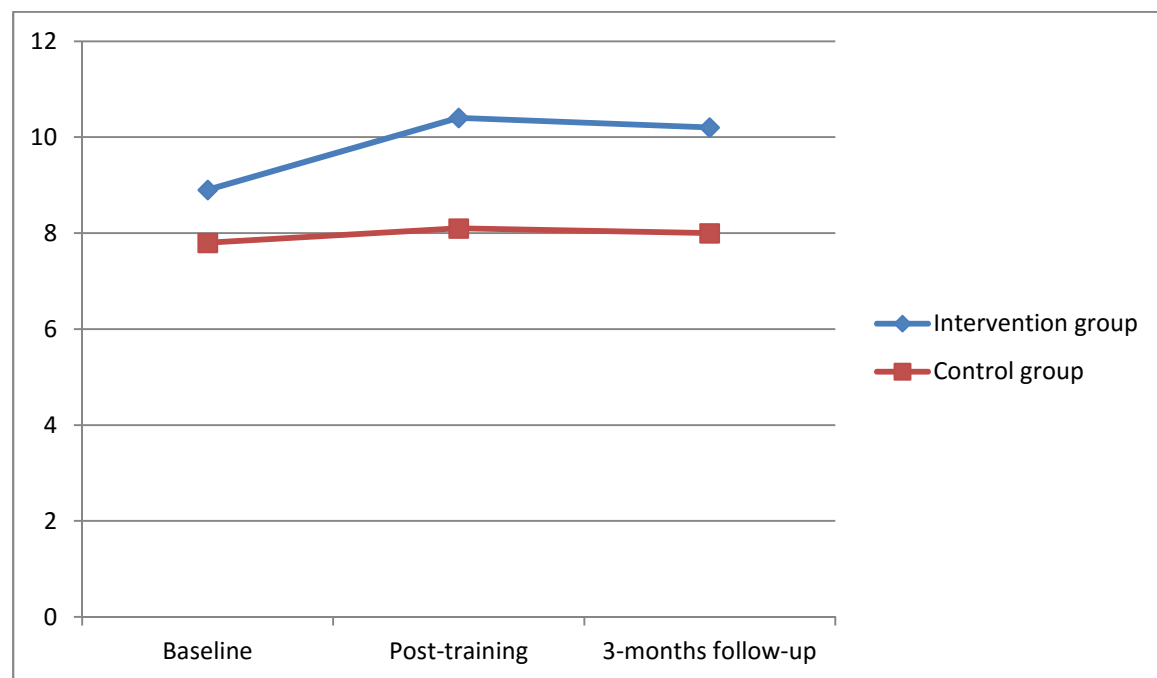
The group by time interaction effect for participants' ability to cope with stress was not significant indicating that this was not influenced by being part of the intervention group, when controlling for the potential confounding influences of age, gender and ethnicity. While none of these variables had significant interaction effects by time, their presence in the model were sufficient to confound the linear relationship with intervention group. There were also no changes over time or group by time interaction effects for mental wellbeing (table 4).

Figures 2-4 illustrate the change over time by group of the three outcome variables, not controlling for any potential confounding variables. It shows the trend in the intervention group towards increased mental wellbeing which, given more time, may have become statistically significant. It also shows the univariate changes over time in intervention group participants' ability to cope with stress and knowledge of mental effectiveness in contrast to the control group.

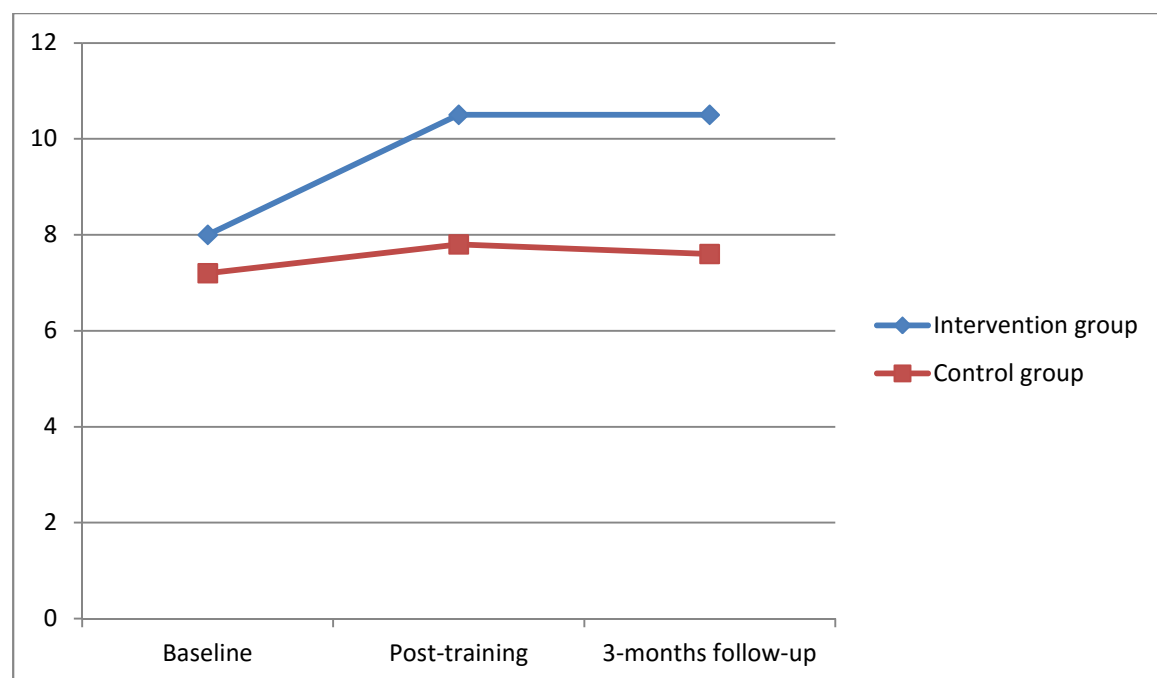
**Figure 2. Change in WEMWBS over time by group**



**Figure 3. Change in ability to cope with stress over time by group**



**Figure 4. Change in knowledge of mental effectiveness over time by group**



## 4.5 Process evaluation

The main themes to emerge from the analysis of the focus group data are presented and discussed under the main headings of the topic guide.

### 4.5.1 Getting on the course

Most of the participants had heard of the course through communication from NSUN, either by direct email or through the organisation's newsletter. One participant had heard about the course through the London Recovery College.

For some the joining process was felt to be 'very smooth' and 'seamless.' Several participants highlighted the fact that they had immediate responses to emails and were very satisfied with the 'quick joining process.' However, others had found the process more challenging, citing particular difficulties with delayed responses to emails and with the online application form.

*'Don't rely on computers...there are people who have it in their care plan not to go on a computer.'*

The majority of participants felt that the quality of the co-ordinator's work made a positive difference to the experience. The co-ordinator was generally felt to be contactable and responsive, with one participant noting she went 'above and beyond.' Most participants agreed that this was important for encouraging engagement, feeling valued and inspiring confidence:

*'We felt really valued.'*

*'Very nice and happy and cared about.'*

One negative experience related to accessing the physical environment, with participants reporting it was difficult to get into the building:

*'It was good it was summer as we had to wait outside for ages.'*

The taster session was felt to be helpful, particularly to manage expectations. Several participants noted it was also helpful to meet the main facilitator and the co-ordinator before the course began. Having an introduction to the main topics was felt to be helpful for making a choice about attending. For some participants it was important to clarify that the course was not about 'mindfulness'. One participant noted that having an introduction to the evidence base inspired confidence in the training.

### 4.5.2 The training

Participants discussed the fact that the main presenter had no clinical mental health experience or experience of service use. For most, this was not felt to be an issue as the focus was kept on maintaining 'mental good health', rather than on clinical symptoms.

*'It was good to have training about mental health, not mental ill health.'*  
*'I'd rather have something positive [like this].'*

The second presenter had mental health experience and this was generally thought to achieve a balance.

Both presenters were generally felt to have 'practiced what they preached' and having different presenters was seen as helpful 'as people have different learning styles.' However, one participant reported that she felt alienated from the presenters because of their social background and her assumption that they lacked personal experience of mental health problems: 'it didn't feel authentic...didn't feel very real'. Other participants said that the use of practical examples and facilitated reflection on 'how it relates to us [and] our past or current behaviour' would have enhanced the training facilitation.

Having both a male and a female presenter was seen as positive and one male participant noted that 'men aren't as likely to engage on courses...so credit to Mindapples that men came to the training'. In a learning environment which could have provoked anxiety, one participant noted that they were 'brilliant facilitators and made me relaxed.' However, some participants recommended 'think[ing] about preparing people for the change between presenters.'

The majority of participants said that presenters brought quiet people in and if people got lost, most of them felt able to ask for clarification. Time-keeping and the facilitation of discussion and interactions was generally experienced as well done, if not a little rushed at times:

*'Interactions were well-handled, it was clear that people shouldn't take things personally and can discuss issues with the presenters afterwards.'*  
*'She wanted to move us on.'*

However, some participants felt that at times the facilitators 'needed to put more boundaries around the group', with one person mentioning having the confidence to tackle the use of discriminatory language which could cause upset. One participant specifically cited the

need to have 'better management of excitement in group.' This was supported by a recommendation to be 'more realistic about expectations of participants and mental health, moods and interactions.'

Some participants said that feedback on the sessions and on the diary-keeping 'homework' could have been more regular and would have been useful for summarizing and reinforcing learning as well as encouraging and supporting diary-keeping activity in-between sessions.

There was a suggestion from the participants that perhaps service users could be trained to deliver the training.

The responses about the pace of the course were mixed, with the majority of participants reporting that sessions could be longer and less 'rushed'. Discussion also covered the balance between the taught and group discussion aspects of the course and the elements requiring reading and 'homework.' One participant noted that for her the 'course went too fast, and I needed additional information to supplement booklet', while another reported that he 'didn't have enough time to reflect and learn' during the session. Finally one individual noted that: 'I've got problems with my memory so [I couldn't] remember all the stuff at such a fast pace.'

Several participants felt that there needed to be more interaction with the trainers and among the group as well as opportunities for questions, answers and breaks. Many felt that a two-hour class with time for more feedback and discussion would have been better, while a few participants wanted sessions to be shorter

*'We really needed less reading and more teaching and discussion.'*

The pace of the training sessions could sometimes feel rushed and it was felt that a two-hour session could be structured to accommodate people who arrive later, particularly if they are slowed down by medication or delayed by transport in the morning:

*'Things felt rushed – one and a half hours can't accommodate latecomers, two hours would be better. If people are on medication and sessions are in the morning they may need longer.'*

*'The sessions seemed a bit too rushed for me. I felt it would've been better if the sessions had been half an hour or so longer with a 15 minute break to have a breather, take in the info and chat to other attendees.'*

Some participants felt that a bigger recap on learning and the chance to feedback from the previous week in the following session would have been helpful.

*'You should be able to share what you've been thinking and use the diary as a way to feed back.'*

The participants discussed the effect of the training being designed for people without diagnosed mental health problems in a corporate workplace setting. Some questioned its transferability, while others felt it was positive to experience a different approach and values to clinical mental health services that are 'heavy and unfriendly'. Comments about the applicability and level of the training included:

*'Is the training transferrable for people with mental health problems when it's designed for businessmen and women? It needs revising and adjusting for people with mental health problems.'*

*'It wasn't geared up at the right level for me but it depends on who you are.'*

*'It needs to be tweaked, but it works well because it's a general user guide to the mind.'*

The majority of the participants found that the positive, non-clinical approach to 'mind health' and the universal nature of the training engaging and non-stigmatising:

*'It's a foundation on how your mind works, which is good for everyone.'*

*'They were training us the way they'd train everyone else and not condescending like doctors.'*

*'Mindapples isn't designed for mental people...it's for everyone.'*

*'You don't have to identify to benefit from it...it's good to get away from labels that make you feel rubbish.'*

*'It felt like access into the corporate world, not being segregated.'*

*'This is how the rich kids live.'*

However, a minority of participants experienced the training as 'too Americanised about positivity', with comments that there was an 'over-optimism' about people that for one participant 'became no longer based in reality.' While the emphasis on positivity was felt by some to be, at times, 'imbalanced', the positive tone in the training was experienced as a positive contrast to 'negativity around mental illness.'



Generally it was felt that the corporate training model needs to be adapted for people with mental health problems, but that the non-clinical, positive, 'non-segregated', non-stigmatising approach to training on the mind was experienced as very positive and should not be lost.

#### 4.5.3 Working in a group

Again, there were mixed responses to how working in a group was experienced, but the majority of participants reported that the co-ordinator's support helped the group experience. Most participants found group discussion and interactive sessions helpful for their learning and the overall experience and some reported wanting more of this, while a minority found working intensively in a group more challenging. The opportunity to be in a safe social space was also valued by some participants.

*'The group worked well as you can learn from others in the group too.'*

*'It was nice being in the group and sharing.'*

*'Interactive sessions were very helpful and enjoyable, especially "know yourself", learning about you as an individual.'*

*'Safe, understanding, respectful. Being safe is very important to me.'*

*'There could have been more group discussions and engagement with the group...practical ways to talk about what it meant to us.'*

*'Some things were presumptuous. Like being with like-minded people. But it helped me to learn to be with other people too.'*

*'Enthusiasm is nice but if it goes on it doesn't work for me.'*

*'The group helped the learning about myself but I also enjoyed getting to know and talk with facilitators at the end, they were available for half an hour after the end. So maybe think about how accessible groups are to people and consider time for one to one.'*

One participant came to the training even though she was 'in a bad space' and found it difficult to engage with the course and to work in a group. She felt that 'just being in a room with others can be beneficial, even if not engaging but not in a space to engage' and that 'familiar faces, social contact was good.'

Several participants felt it would have been good if group members continued to connect with each other between sessions to reinforce learning using social media, such as a closed Facebook page.

The value of social connections made within the group was emphasised in discussion about participant decisions to attend the focus group. A number of participants chose to come to the focus group instead of other appointments such as the theatre or a lecture.

*'I'm here today so I connected in some way. It was helpful to come and see people'.*

*'I prioritised coming to the focus group, to reconnect and get closure so I cancelled other things.'*

During the focus group discussion, participants agreed they wanted to stay in touch and all exchanged email addresses.

#### **4.5.4 Learning environment**

The physical learning environment was generally reported less favourably, with participants finding the room in which the training was held 'too small' and 'too hot'. For one person the cramped physical environment was experienced as inaccessible and inhibited their ability to concentrate:

*'The venue was lovely but the table was slightly too small for us all to fit comfortably around the table. Others didn't seem to have a problem with this but I have social anxiety and need a bit more personal space around me in order to be able to relax and concentrate on what is being said.'*

The non-clinical and pleasant feel of the environment was appreciated by many of the participants.

*'I appreciated going to a nice space for a change. It was nicer than the day hospital.'*

*'The last thing I want to do is come to a dump...it was really nice to get away from the shit-hole I live in.'*

However, one participant felt strongly that the training venue was alienating and that she didn't 'feel comfortable in the building'. For her, the 'establishment' environment did not feel representative of the Mindapples approach.

Water and fruit was available in the sessions. This was felt to reflect what was being taught about looking after yourself. The central location was generally felt to be helpful but several participants recommended that the training could be also run in local communities.

Several participants mentioned the importance of having an accessible building and being aware of people's dietary requirements.

#### 4.5.5 The learning

The distribution of the supporting booklets and worksheets before the sessions was reported to be helpful as many participants found they could then focus on the presentation. Generally, being taken through the booklets was found to be very helpful to learning.

The format, design, tone and content of the booklets received positive feedback in the focus group discussion. Many participants particularly appreciated the fact the booklets were attractive, well produced, not 'clinical looking' and did not use clinical language. The colour coding of the booklets was found to be helpful and generally participants found the booklets useful as 'back up' and to review learning and their size was noted as being helpful for portability.

*'The psychology behind the packaging made the course materials more accessible'.*

*'The language and look matched up'.*

*'They didn't have set ideas about mental health, they were very open and didn't focus on mental ill health.'*

*'It helps that they're sweet, attractive little books.'*

*'They were really nicely made and designed. Not scrappy bits of A4 photocopy like I usually get.'*

*'[The books are]...brilliant. I carry them around in my satchel. If I'm stuck I'll have a look at them.'*

However, one participant noted that:

*'The booklets that were given out at each session were great but didn't have all of the information that Andy was giving to us and it would've been nice if everything was all in there for future reference and I hadn't been worried about trying to make notes on everything.'*

The supporting books were cited by several as being helpful for reinforcing and reflecting on the learning from the sessions and the tone used was generally appreciated.

*'I think the little books are incredible...they are balanced and easy to understand but not patronising. They talk to you like an adult. That's really rare.'*

*'The best bit is the take-away tools. Without the books it wouldn't have worked so well...I learned more when the course finished because I could read and absorb it at my own pace.'*

In addition to the booklets, participants received information sheets and diary sheets (to be filled out in between sessions). Both were generally found to be helpful for supporting and reinforcing learning, particularly as the information sheets were 'short and sweet' and there was no pressure to complete the exercises and the diary sheets.

While some participants appreciated the lack of pressure to complete the diary sheets because it could be stressful, several others would have liked greater motivation and support to do so. The opportunity to feed back on their diary could have encouraged some people to complete it.

*'It would have been more helpful to have feedback at the beginning of the session, otherwise there didn't seem to be a point [to the diary].'*

Some passed the information sheets onto others to help them. However, a number of participants had suggestions for improvements, particularly for accessibility and storage options:

*'The diary sheets would have been better as a logbook or in small book form.*

*Think about storage of the books and sheets.'*

*'CDs or recordings of the session would have helped me to reinforce learning and putting training into practice.'*

Several participants said later follow-up sessions could help with ongoing learning and to improve practice.

#### **4.5.6 Course content**

The general approach to understanding the mind and the positive, non-stigmatising and non-clinical nature of the course ('applied psychology in the field') was very well received.

'Love your mind' was felt to be a good place to start, particularly for people with mental health problems and 'reflected the [course] intentions well'. The use of examples was found to be helpful, although a few participants reported wanting more practical examples and examples that were more relevant to them.

One participant reported that learning about being aware of power relationships and assertiveness was immediately useful to a particular life situation. Several participants reported this aspect of the training increased their awareness and could improve keeping safe. The inclusion of 'basic things' like eating and drinking was well received by many participants, who reported that it was helpful to be reminded to take care of themselves.

*'It was good to be reminded of simple things like drinking water...relaxation and things you do that might only have an immediate effect that aren't good for you, like comfort eating.'*  
*'Some of the basic things like food and drink that were introduced actually made me think...I'm more aware of my lifestyle and the things I do.'*  
*'The 5 a day things you enjoy was very helpful for me.'*

A few participants felt uncomfortable with the idea of 'influencing people', while others found this awareness helpful.

*'I don't want to be manipulative, but I agree with being assertive rather than aggressive.'*  
*'Influencing people wasn't relevant to me.'*  
*'Awareness of being influenced is very helpful tricks others are playing on me. I'm more aware and on guard. It's useful for spotting mind games.'*  
*'[Influencing people]...helped me write a letter to my son's psychiatrist.'*

Learning about emotional intelligence was highlighted as being particularly helpful for one participant: 'that little bit of understanding is really useful as it chips away at some of my emotional issues.'

A number of participants recommended that the course content reflect some of the concepts currently being used in mainstream mental health services, such as recovery and resilience and the peer support model.

*'Put it in the context of recovery approach. Resilience could have been emphasised more.'*  
*'The whole course was superb, but where I am in my learning it's the recovery model and resilience.'*

One participant suggested that people can take 'mechanisms from the training help with recovery.'

*'With recovery you pick up tools and put them in your toolkit.'*

While some reported that while the course content was relevant and useful, it was too basic or technical for them, others found the content very informative, with accessible presentation.

*'Maybe it was a bit too basic at times.'*

*'I've done this sort of thing before.'*

*'Even though it was academic, the presentation of it made it good.'*

*'They were very informative and science was linked to everyday life so every minute was very interesting with lots of discussions and clarifications.'*

*'I liked it when they spoke about the studies that have been done...made it stick a bit more.'*

*'I'm more creative so while [it] was good it was too technical.'*

#### **4.5.7 Impact**

Overall, participants found the whole course to have a positive impact on their understanding of 'the mind' and, for many, improved their mood and mental health management, feelings of positivity, confidence, self-esteem and self-concept, at least in the period during and immediately after the course.

*'Coming regularly to the course helped with life difficulties over the period.'*

*'I understand it's important to love all aspects of yourself. Even your mind.'*

*'It's like recovery and being recovered.'*

*'The course has given me a different perspective.'*

*'Some things are variable in mental illness and can change.'*

*'It gives me more of an understanding of myself.'*

*'It helped with the thirst to understand my mind.'*

*'The modules are really affirmative.'*

*'It's changed my attitude.'*

*'I can think I've got traits like that but I'm actually alright.'*

*'I started looking upwards instead of downwards.'*

*'It's helped in my day to day work [with understanding my moods and being assertive]...it's given me guidance for situations...I feel I've made better decisions.'*

*'I've got a decreased sense of self-blame and less of a sense of "being wrong".'*

*'It's made me a better paranoid schizophrenic.'*

Some participants reported a decreased sense of self-blame and individual sense of 'being wrong'. One participant discussed how the training helped her with managing

relationships, communication, controlling mood and reactions and the subsequent stress reduction had resulted in better sleep.

*'It helped to not react badly to other people's negativity. I felt overall more positive, thinking more positively helps wellbeing.'*

Several participants felt encouraged to go to assertiveness and positivity training and others reported that the training had motivated them to go on to undertake further learning and development.

*'I've taken an online course and a mental health diploma course and found it very interesting. I kept barreling on....starting on FutureLearn.'*

*'It's sparked me into wanting to learn more...kick started my wanting to learn stuff again...not even just mental health stuff.'*

Generally the training was found to be empowering and its practical nature was felt to be effective. The majority of participants said they would recommend the course to peers, relatives and employers.

*'It was like being given a hand and someone saying "C'mon".'*

*'It was like a helping hand.'*

*'It's good because it's so practical.'*

*'Thanks again for this opportunity. I am whole-heartedly recommending it to many of my service-user peers.'*

*'I have been able to implement the course into my life and would recommend it to everybody.'*

*'I recommended it to my council training officer.'*

*'I went through it with my kids...I think it should be taught in schools.'*

## 5 Discussion

### 5.1 Main findings

This study has found that it is feasible to adapt and deliver the Mindapples training programme to people with experience of using mental health services. While some felt that the content was not always appropriate, many welcomed its focus on mental health rather than illness and took away many learning points. The high attendance at the training provides good evidence that it readily engaged the participants.

The main finding of this study is that the Mindapples training statistically significantly improved participants' knowledge of mental effectiveness in comparison with the control group. This improvement was maintained three months later. This suggests that the learning was internalised and could be drawn upon in future when required. The charisma of the presenters and the novelty of the training style helped to engage the participants in their learning and maintain their interest in the programme. However, the content had an effect on their knowledge of mental effectiveness, as those who attended more sessions scored higher on the knowledge quiz, illustrating that it was 'substance' as well as 'style' which made the difference.

The training was also associated with improvements in intervention group participants' ability to cope with stress. However, their ability to cope with stress was higher than the control group at baseline which influenced this improvement when examined in the longitudinal analysis. Further research is required to examine if this improvement can be maintained when the control and intervention groups start from the same place.

The training had no impact on participants' mental wellbeing. This was also found in the evaluation of the pilot of Mindapples training with student nurses (Webber et al., 2015). The non-statistically significant trend towards an improvement for the intervention group may suggest that, given more time, a statistically significant improvement may emerge, but it is best to be cautious about this without evidence of its impact.

The participants were very positive about the Mindapples training, though provided many suggestions about how it could be improved. Changes could be made to the venue, learning materials and style of the sessions, for example. However, the participants provided many practical examples of how it has helped them in their lives. In particular, they found the focus on mental health (as opposed to illness) refreshing and supportive of their recovery. They were also keen to share what they learnt and would recommend it to others, which gives a strong indication of its value to them.



## 5.2 Study limitations

82 participants were recruited for this pilot study. Considering our sample comprised people recovering from mental health problems whom we asked to pilot an 8-week training intervention, this is very respectable. Additionally, retention in the trial was very high. We achieved follow-up data at three months post-training from 74.4% and 86.0% of the intervention and control groups respectively. Drop-out in the study was minimal and that it was lower in the control group is evidence of the interest in the training (participants appeared to want to stay in touch with the research team to ensure they can attend the training at the end of the study). However, this pilot needs to be followed by a larger study with tighter eligibility criteria to explore the impact of the training in specific groups of people with experience of mental health service use and to include more men who are underrepresented in this study.

The researchers were unable to randomise all the participants to the intervention or control group for practical reasons. Although there were few differences between the groups, and these were controlled for in the analysis, future research will benefit from full randomisation to minimise any potential selection bias. A larger sample and lower loss to follow-up will also help us to estimate the effectiveness of the training with a higher degree of precision. The modest effect sizes found in this study may be an underestimate of the effectiveness of the training due to the loss to follow-up during the trial.

There was a small risk of contamination in the study with intervention group members sharing information about the training and training materials with control group members. There is no evidence that this occurred, but it will need to be carefully considered in future research how to minimise this risk.

Focus group participants were self-selected and may have been more positive about the training than those who chose not to participate. Those who attended more training sessions were more likely to also attend the focus group. This may have led to a bias in favour of the training in the reporting of the qualitative process evaluation. Although we sought critical perspectives on the training, future evaluations will need to recruit a random sample of participants to obtain more balanced perspectives. However, there were several discordant voices in the focus groups, suggesting that a reasonable balance was achieved in our data collection.

Finally, we did not measure mental health symptoms or recovery as secondary outcomes. It is possible that the training will have a positive impact on recovery over time (and beyond the three months follow-up we conducted), making it important for this to be measured in future studies with a longer follow-up period.

### 5.3 Recommendations

1. This pilot study found that people with experience of using mental health services can increase their knowledge of mental effectiveness by attending the Mindapples training programme. The size of the effect on this outcome was moderate. This indicative evidence of effectiveness suggests that the Mindapples training may be beneficial for people with experience of mental health service use and it may play a positive role in their recovery. As there is no evidence that it causes harm, the findings from this pilot study suggest that the training is safe to use and may help people.
2. Further research is required to evaluate its impact on recovery from mental health problems. A larger study is required to more accurately estimate the effectiveness of the training and to evaluate if the training has a similar effect in specific groups of people with mental health problems. This study will require a longer follow-up period and will need to use more varied outcome measures.
3. There is some evidence that some participants already had some knowledge of the course content. Many had several years' experience of using mental health services. Therefore, the training could be more effective if used with people after their first experience of mental distress, or as part of public health preventive interventions. However, some participants with a long history of service use did say the course was different to anything they had done previously. It is recommended that future pilots of the training are fully evaluated to understand where this intervention fits into existing service provision and to ensure it is achieving its desired outcomes.

## 6 References

Department of Health (2014) *Closing the Gap: Priorities for essential change in mental health*, London, Department of Health.

Health and Social Care Information Centre (2014) *Health Survey for England - 2013*, Leeds, Health and Social Care Information Centre.

Lancaster, G. A., Dodd, S. & Williamson, P. R. (2004) Design and analysis of pilot studies: recommendations for good practice. *Journal of Evaluation in Clinical Practice*, 10, 2, 307-312.

Maheswaran, H., Weich, S., Powell, J. & Stewart-Brown, S. (2012) Evaluating the responsiveness of the Warwick Edinburgh Mental Well-Being Scale (WEMWBS): Group and individual level analysis. *Health and Quality of Life Outcomes*, 10, 1, 156.

Sawatzky, R. G., Ratner, P. A., Richardson, C. G., Washburn, C., Sudmant, W. & Mirwaldt, P. (2012) Stress and depression in students: The mediating role of stress management self-efficacy. *Nursing Research*, 61, 1, 13-21.

Stewart-Brown, S., Platt, S., Tennant, A., Maheswaran, H., Parkinson, J., Weich, S., Tennant, R., Taggart, F. & Clarke, A. (2011) The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): a valid and reliable tool for measuring mental well-being in diverse populations and projects. *Journal of Epidemiology and Community Health*, 65, Suppl 2, A38-A39.

Strauss, A. C. & Corbin, J. M. (2008) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, Thousand Oaks, CA, SAGE.

Webber, M., Murdock, A. & Scott, C. (2015) *Evaluation of Mental Effectiveness Training Pilot. Final Report for Guy's & St Thomas' Charity*, York, University of York.